

**Exhibit No.:** \_\_\_\_\_  
**Issue(s):** Allowance for Funds Used  
During Construction (AFUDC)  
**Witness/Type of Exhibit:** Schallenberg/Direct  
**Sponsoring Party:** Public Counsel  
**Case No.:** WR-2020-0344

**DIRECT TESTIMONY**

**OF**

**ROBERT E. SCHALLENBERG**

Submitted on Behalf of the Office of the Public Counsel

**MISSOURI-AMERICAN WATER COMPANY**

CASE NO. WR-2020-0344

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**Denotes Confidential Information that has been Redacted**

November 24, 2020

**NON-PROPRIETARY**

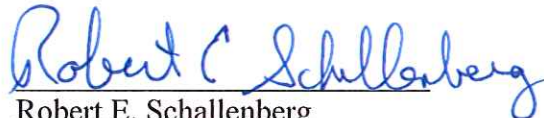
**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Missouri-American            )  
Water Company's Request for                )  
Authority to Implement General Rate        ) Case No. WR-2020-0344  
Increase for Water and Sewer Service     )  
Provided in Missouri Service Areas        )

**VERIFICATION OF ROBERT E. SCHALLENBERG**

Robert E. Schallenberg, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my direct testimony in the above-captioned case.
  
2. My answer to each question in the attached direct testimony is true and correct to the best of my knowledge, information, and belief.



Robert E. Schallenberg  
Director of Policy  
Office of the Public Counsel

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**DIRECT TESTIMONY**  
**OF**  
**ROBERT E. SCHALLENBERG**  
**MISSOURI-AMERICAN WATER COMPANY**  
**CASE NO. WR-2020-0344**

1 **I. INTRODUCTION**

2 **Q. What is your name?**

3 A. Robert E. Schallenberg.

4 **Q. What is your business address?**

5 A. Post Office Box 2230, Jefferson City, Missouri, 65102.

6 **Q. By whom are you employed and in what position?**

7 A. I am the Director of Policy at the Office of the Public Counsel (“OPC” or “Public  
8 Counsel”).

9 **Q. What is your educational background, what professional credentials do you hold,  
10 and, briefly, what is your work experience related to utility regulation?**

11 A. I am a 1976 graduate of the University of Missouri at Kansas City with a Bachelor of  
12 Science degree and major emphasis in Accounting. In November 1976, I successfully  
13 completed the Uniform Certified Public Accountant (“CPA”) examination and  
14 subsequently received the CPA certificate. In 1989, I received my CPA license in  
15 Missouri. I began my employment with the Missouri Public Service Commission  
16 (MoPSC) as a Public Utility Accountant in November 1976. I remained on the Staff of the  
17 MoPSC until May 1978, when I accepted the position of Senior Regulatory Auditor with  
18 the Kansas State Corporation Commission (KCC). In October 1978, I returned to the Staff  
19 of the MoPSC. Thereafter, I held auditor and management positions with the Staff of the  
20 MoPSC (Staff). I held auditor and management positions with the Staff through May 2018  
21 when I accepted my current position with OPC. See attachment **RES-D-1**.

1 **Q. Why are you testifying in direct testimony in this case?**

2 A. I identify issues with and offer resolutions to the Missouri American Water Company's  
3 (MAWC) calculation of Allowance for Funds Used during Construction (AFUDC). I  
4 discovered that MAWC is not properly including the low cost of its short-term debt in its  
5 AFUDC rate. To the extent short-term debt costs are not factored into the AFUDC rates,  
6 they should be captured in the company's allowed rate of return ("ROR"). OPC witness,  
7 David Murray, provides his recommendation for MAWC's ratemaking capital structure  
8 under two scenarios: (1) the Commission orders MAWC to appropriately consider short-  
9 term debt in its AFUDC calculations, or (2) MAWC continues to exclude short-term debt  
10 in its AFUDC rate. I address the impacts on MAWC's rates of not fully using short-term  
11 debt costs in the amounts of AFUDC capitalized into rate base and imputing higher capital  
12 costs that MAWC was not incurring. In addition, I found that MAWC is inappropriately  
13 applying AFUDC increases to rate base and depreciation expense, as construction time  
14 periods and amounts were not determinative of the amounts of AFUDC MAWC booked.<sup>1</sup>

15 **Allowance for Funds Used During Construction (AFUDC)**

16 **Q. What is your recommendation for the amount of AFUDC that the Commission should**  
17 **include in MAWC's revenue requirements which the Commission uses for**  
18 **establishing MAWC's water and sewer rates?**

19 A. My recommendation is two-fold. First, approximately \$20 million needs be removed from  
20 MAWC's recorded rate base to establish new water and sewer rates in this case. Second,  
21 how MAWC records short-term debt costs for purposes of AFUDC needs to be addressed  
22 to prevent any further over-recovery of capital costs from MAWC customers. There are  
23 two options to discontinue the current overstatement of capital costs. The first, which I  
24 address in my testimony, is to reflect short-term income debt with related costs in the  
25 amount of AFUDC included in rate base. The second, as addressed in Mr. Murray's Direct  
26 Testimony, is to reflect short-term debt with related costs in the capital structure.

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<sup>1</sup> See MAWC 2019 MoPSC annual report, p. F-23.

1 **Q. Is MAWC’s rate base overstated due to how it has recorded AFUDC?**

2 A. Yes. AFUDC is recorded as an addition to construction work in progress (CWIP) costs in  
3 account 107, increasing rate base when the construction is completed. AFUDC is a credit  
4 to account 420 increasing income. When excess AFUDC is recorded then rate base and  
5 related depreciation expense will be overstated when construction projects are completed,  
6 resulting in a higher revenue requirement to be absorbed in customer rates. The amount of  
7 AFUDC MAWC has recorded on its books exceeds the amount prescribed by the  
8 Commission’s rule adopting the NARUC’s Uniform System of Accounts (USOA) issued  
9 1973, as revised July 1976. AFUDC to be included in rate base is to be “**the net cost for**  
10 **the period of construction of borrowed funds used for construction purposes** and a  
11 reasonable rate upon **other funds when so used.**”<sup>2</sup> (Emphases added). Thus, the cost of  
12 borrowed funds used to finance plant construction is capitalized as part of the utility’s plant  
13 cost. Any other funds, *i.e.*, funds that are not borrowed, that are used to finance plant  
14 construction are to be assigned a reasonable rate when they are capitalized. Only when  
15 CWIP balances exceed borrowings are those other funds capitalized. In the test year  
16 MAWC applied interest during construction to all projects regardless of costs or length of  
17 construction period. Since January 1, 1985, the method of computing for the allowance for  
18 funds used during construction was changed to using the equivalent to the weighted cost  
19 of capital, determined in the most recent rate order net of the income tax effect upon the  
20 debt portion thereof.<sup>3</sup>

21 **Q. How should the Commission treat AFUDC for purposes of setting MAWC’s rates in**  
22 **this case?**

23 A. The Commission should include in the revenue requirement to establish rates in this case  
24 the cost of the funds used to construct its plant. The concern is that AFUDC may be  
25 established and recorded at amounts greater than the actual costs of the funds used in  
26 construction. Excess amounts will result in greater profits to the utility

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<sup>2</sup> See MoPSC adopted NARUC Uniform System of Accounts (USOA) for Class A and Class B Water Utilities, issued 1973, as revised July 1976, Acct. No. 420, p. 107.

<sup>3</sup> See MAWC 2019 MoPSC annual report, p. F-23.

1 **Q. If short-term debt costs are used in an AFUDC methodology, how are they used?**

2 A. If the Commission were to adopt the short-term debt costs AFUDC methodology, then the  
3 AFUDC rate would be determined based on the initial assignment of the short-term debt  
4 balance to the corresponding CWIP balance. If the short-term debt balance exceeds the  
5 CWIP balance, then the AFUDC rate is the short-term debt interest rate, and the short-term  
6 debt balance that exceeds the CWIP balance can and should be considered for inclusion in  
7 the utility's capital structure and cost of capital for purposes of establishing its revenue  
8 requirement.

9 However, if the CWIP balance exceeds MAWC's short-term debt balance then additional  
10 work is needed to determine the cost of funds for the CWIP exceeding short-term- debt  
11 levels. I used an analysis of the "new money" injected into MAWC in years the CWIP  
12 balance exceeded short-term debt balances. I found that the amount of long-term debt  
13 issued in the year in excess of the retirement of securities and short-term debt occurring in  
14 the year to be the source of borrowings supporting the excess CWIP balance exceeding  
15 short-term debt. It is the cost of the long-term debt issued in the year that makeup the  
16 second AFUDC component. The two components are then weighted to determine the  
17 AFUDC rate.

18 **Q. Can you provide examples of your costing method to be used to determine the cost of**  
19 **CWIP in excess Short-term Debt levels?**

20 A. Yes. The cost of the CWIP balance that exceeds the short-term debt balance is determined  
21 by examining the "New Money" raised in the period.<sup>4</sup>

22 This AFUDC residual cost method is shown in schedule **RES-D-2** for the years 2016, 2012,  
23 and 2011 when the method is needed to determine the AFUDC amount associated with  
24 CWIP balances in excess of short-term debt amounts. Whenever the residual cost method  
25 is applied, no short-term debt should be considered for inclusion in capital structure and  
26 cost of capital to establish MAWC's revenue requirement.

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<sup>4</sup> *Id.* at p. F-15.

1 For each capital project, the AFUDC rate should be applied based on the total cost of the  
2 project and continue for the length of time the project is under construction. When short-  
3 term debt is not considered in determining the AFUDC rate, then it must be considered in  
4 determining the utility's cost of capital. To do otherwise would overcharge the utility's  
5 customers for capital costs that it did not incur.

6 **Q. How does MAWC's ultimate parent holding company American Water Company**  
7 **define the terms Allowance for Funds Used During Construction ("AFUDC"),**  
8 **Construction Work-In-Progress ("CWIP"), and Rate Base?**

9 A. American Water defines<sup>5</sup> these terms as:

- 10 \*\* \_\_\_\_\_
- 11  \_\_\_\_\_
- 12 \_\_\_\_\_
- 13 \_\_\_\_\_
- 14 \_\_\_\_\_
- 15 \_\_\_\_\_
- 16  \_\_\_\_\_
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- 23 \_\_\_\_\_
- 24 \_\_\_\_\_
- 25 \_\_\_\_\_
- 26 \_\_\_\_\_

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27 **Q. What is the MoPSC's rule regarding AFUDC applicable to MAWC?**

28 A. Commission rule 20 CSR 4240-50.030 adopted the 1973 NARUC uniform system of  
29 accounts (USOA) for water utilities, as revised July 1976, for Class A and Class B Water  
30 Utilities like MAWC. Schedule RES-D-3 is a copy of this USOA. AFUDC is addressed on  
31 page 107 under Account No. 420 of Schedule RES-D-3.

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<sup>5</sup> See response to OPC data request 1086; 8/15/2020 Practice Number: PRA-ACCT03/03 effective 8/15/2020, page 4 of 4.



1 **Q. Earlier you quoted part of the rule. How does that quote appear in context?**

2 A. As follows:

3 This account shall include concurrent credits for allowance for funds used during  
4 construction based upon the net cost for the period of construction of borrowed  
5 funds used for construction purposes and a reasonable rate upon other funds when  
6 so used. (See utility plant instruction 3 (17).)<sup>6</sup>

7 **Q. How did MAWC calculate its AFUDC for the 2019 test year?<sup>7</sup>**

8 A. MAWC reported to the Commission in its 2019 annual report<sup>8</sup> that:

9 \*\* \_\_\_\_\_  
10 \_\_\_\_\_  
11 \_\_\_\_\_  
12 \_\_\_\_\_

13 - \*\*

14 Based on what MAWC says in this report, it has been using this AFUDC methodology  
15 since January 1, 1985.

16 **Q. What is the relationship between short-term debt and CWIP balances in the test year?**

17 A. MAWC's short-term debt balances exceeded its construction work-in-progress balances  
18 for each month in the 2019 test year.<sup>10</sup>

19 **Q. Do you have issues with how MAWC calculated its AFUDC rate and how it has  
20 addressed its short-term debt?**

21 A. Yes. MAWC gave no weight to its use of short-term debt as a source of funds for capital  
22 projects or its overall cost of capital. MAWC's method for determining its AFUDC uses  
23 an overall cost of capital determination and omits any weight from its low cost short-term  
24 debt. This practice that apparently has been in place since at least January 1, 1985,  
25 overstates the AFUDC balances added to MAWC's rate base since that time. Rather than

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<sup>6</sup> NARUC Uniform System of Accounts (USOA) for Class A and Class B Water Utilities, issued 1973, as revised July 1976, Acct. No. 420, p. 107.

<sup>7</sup> See MAWC's response to OPC data request # 1015 attachment 1 CONFIDENTIAL.

<sup>8</sup> See 2019 MAWC's 2019 annual report to the Commission, p. F-23.

<sup>9</sup> See MAWC's 2019 annual report to the MoPSC p. F-23.

<sup>10</sup> MAWC's response to Staff data request MoPSC 0038.

1 attempting to redress this historical over collection in MAWC's rates, OPC is seeking to  
2 end this overcharge in rates going forward.

3 **Q. How much AFUDC is recorded on MAWC's books?**

4 A. I obtained information from MAWC's annual reports to the Commission for the years 2002  
5 thru 2019. The Commission's Electronic Information Filing System (EFIS) does not  
6 include MAWC's annual reports prior to 2002. From the reports I was able to review I  
7 learned that, based on its methodology since at least 1985, MAWC had to have overstated  
8 the AFUDC it added to its rate base. While the information available was limited, I was  
9 able to derive the extent of MAWC's excess AFUDC from 2002 to 2019. Schedule RES-  
10 D-4 is a copy of my calculations and methodology to calculate that excess AFUDC. I  
11 calculated that MAWC added \$33.5 million in excess AFUDC to rate base for the years  
12 2002 through 2019.

13 **Q. The Commission's rule (20 CSR 4240-50.030(4)) includes the following:**

14 **(4) In prescribing these systems of accounts the commission does not commit itself to**  
15 **the approval or acceptance of any item set out in any account for the purpose of fixing**  
16 **rates or in determining other matters before the commission.**

17 **Why is this AFUDC important?**

18 A First, a utility's revenue requirement begins with the amounts charged to accounts reflected  
19 on the utility's books and records. The cited section of the Commission's rule notes that  
20 accounting consistent with the Commission adopted USOA does mean the costs are  
21 approved to be recovered in rates. AFUDC is one of the eighteen components of  
22 construction costs. AFUDC is included in most capital projects. The AFUDC costs that the  
23 utility has charged to its plant projects, then is a cost the utility plans to recover from its  
24 customers. Unless challenged by a party, the AFUDC booked in its plant and ultimately  
25 included in its rate base will be recovered from the utility's customers. Costs recorded on  
26 the utility's books are less likely to be challenged than the costs being adjusted to its books  
27 and records because they are more noticeable.

1 **Q. Does MAWC's lack of consideration of short-term debt in either its capital**  
2 **structure/rate of return or amount of AFUDC added to rate base have any other**  
3 **impacts on the determination of MAWC's revenue requirement for this case?**

4 A. Yes, MAWC profiting by not including the benefits of short-term debt costs in its Missouri  
5 revenue requirement for its water and sewer customers is further increased by charging  
6 these customers the credit line fees that enable the American Water Capital Company  
7 (AWCC) to have access to short-term debt financing used on behalf of MAWC. In 2019,  
8 MAWC was charged and recorded \$207,379 in account 921 for Credit Line Expense.<sup>11</sup> My  
9 recommendation is to remove these credit line fees from MAWC's revenue requirement if  
10 MAWC is allowed to continue to retain the benefits of short-term debt financing. If short-  
11 term debt financing benefits is reflected in MAWC's customer rates, then credit line fees  
12 commensurate with these benefits should also be included in customer rates.

13 **Q. What is Schedule RES-D-5?**

14 A. Schedule RES-D-5 is copies of the materials used to support the footnotes in this testimony.

15 **Q. Does this conclude your direct testimony?**

16 A. Yes.

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<sup>11</sup> MAWC 2019 MoPSC annual report, Page F-6.